

ABSTRACT

A vacuum assisted wound closure device having a means for identifying infectious agents within a wound site. The vacuum assisted wound closure device includes a screen for placement within a wound site, a sealing means for covering the wound site, and a vacuum source in fluid communication with the screen. A canister may be disposed between the screen and vacuum source, such that fluids or other exudates that may be drawn from the wound during application of negative pressure by the vacuum source are collected in the canister for later disposal. A sensing device, which may be a gas chromatograph, sensor array, or other similar device capable of optically sensing the presence of a bacterial agent or other form of infection being drawn from the wound site, is disposed within the screen or interposed between the screen and the vacuum source.